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ABSTRACT

The third part of a 10-part series, this report was compiled by the Educational Development Center at Wilkes College. The series deals with various aspects of the treatment of delinquents and is intended as a summary of research findings in each of the areas treated. Each report was prepared by a scholar-practitioner and is presented in a way that will be of value to professionals who deal both directly and indirectly with the treatment of delinquent youth. The report is, in fact, one manuscript of 627 pages; however, to make it more easily used, it is published in 10 separate parts. A detailed table of contents for the entire series is presented at the end of each part. This part discusses many aspects of reading as it relates to disruptive youth, including theories and models; correlates of success and failure; sensory aspects; assessment and evaluation; and individualized learning environments which may be appropriate for this population. (Author)

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THE TREATMENT OF DELINQUENCY SERIES
AN EDC REPORT

CHAPTER 3

Reading Theory and Research and Chronically Disruptive Youth

August J. Mauser

Northern Illinois University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Editor's Preface

This report is part of a ten part series compiled by the Educational Development Center at Wilkes College. The series deals with various aspects of the treatment of delinquents and is intended as a summary of research findings in each of the areas treated. Each report was prepared by a scholar-practitioner and is presented in a way that will be of value to those whose calling has led them to educational careers dealing both directly and indirectly with the treatment of delinquent youth. The report is, in fact, one manuscript of 627 pages; however, to make it more easily used, it is published in ten separate parts. A detailed table of contents for the entire series is presented at the end of this part.

Additional copies of this part as well as other parts of the series are available from the Educational Development Center, Wilkes College, Wilkes-Barre, Pennsylvania 18703. Permission is granted for bona fide users to reproduce any part of the document. We ask only that the user exert care to preserve the integrity of the document and do justice to the authors by crediting quotations used to the author who prepared the original work.

We invite any and all comments and/or inquiries concerning this series.

Joseph A. Skok, D.P.A.

Director
Educational Development Center

TABLE OF CONTENTS

Introduction 155
Theories and Models of Reading 158
Taxonomic Models 161
Psychometric Models 161
Psychological Models 162
Linguistic Models 171
Transactional Models 176
Correlates of Success and Failure in Reading 178
Intelligence Quotient and Mental Age 179
Socioeconomic Factors 184
Background Experience 185
Level of Motivation 186
Language 187
Reading as a Sensory Process 188
Reading and Vision 189
Reading and Hearing 193
Assessing and Evaluating Reading Growth of Chronically Disruptive Youth 195
Standardized Reading Achievement Tests 197
Individual Reading Tests--Oral and Silent 201
Informal Reading Inventories 203
The Cloze Method of Diagnosing Comprehension 205
Measuring Attitudes 206
Criterion Referenced Testing for Functional Literacy . . . 209
Individualizing Reading and Learning Environments for Chronically Disruptive Youth 212
Retarded Reader 213
Disabled Reader 214
Reluctant Reader 214
Experiences - Past and Present 215
Differences Within the Student Influencing Placement . . . 217
The Regular Classroom and Mainstreaming 220
The Special Class 221
The Special School - Public and Private 222
Diagnostic Curriculum Development Centers 223
The Resource Room and Variations 224
Non-Categorical Resource Room 225
Other Techniques 226
Concluding Statement 227
References 228

CHAPTER III

READING THEORY AND RESEARCH AND CHRONICALLY DISRUPTIVE YOUTH

August J. Mauser

Introduction

Most researchers have cited evidence indicating a greater number of school adjustment and academic problems among chronically disruptive and delinquent youth than those youths who do not exhibit such behavioral characteristics. Jacobson (1974), Mauser (1974), Sabatino (1973), and Silberberg and Silberberg (1971) are recent contributors to the existing body of knowledge which indicates that an inordinate prevalence of youth having reading disorders and/or learning disabilities will also have norm-violating behavior. These may be typed as either a socio-legal or a school-conduct nature or both. To further argue the point that reading or learning disabilities contribute to chronic-disruptive behavior or that chronic-disruptive behavior leads to reading or learning disabilities is not the intent of this chapter. The intent of this chapter is to direct the practitioner, working with chronic and disruptive youth, to more efficient programming and

implementation designs necessary to foster the growth of reading skills and abilities of such troubled youth. As implied earlier, most investigators have found that delinquency and other forms of disruptive behavior run correlary to poor school adjustment. Only the curriculum area associated with reading will be studied as a possible approach to prevention and also as a significant contributor to the positive adjustment of chronic-disruptive youth in an educational setting. No attempts will be made to examine the total school in an attempt to establish it as a base in the development of delinquency.

Studies as early as Percival (1926), who examined the causes of school failure, suggest that 99% of those first-grade children who are not promoted were failing one subject--reading. Thus, as the child progresses through the traditional educational lock step in reading, so does he progress in school in general terms. The trend to equate school promotion in grades 3 through 6 also has been heavily weighted towards the child's ability to read. A prophesy or prediction of eventual delinquent behavior was presented by Roman (1955), who cited that a progressive developmental triad occurs--reading retardation-truancy-delinquency.

Sullivan (1927), Lane and Witty (1934), Hill (1935), Bond and Fendrick (1936) were all early researchers in the field of reading and delinquency. They all report that this population, as a group, was significantly retarded in reading ability. Klasen (1972), in contrast, reported a relatively low percentage of her population of dyslexic

children who were socially maladjusted in the sense of being chronically dishonest; guilty of theft, truancy, severe disciplinary problems; or evidencing other types of delinquent or criminal conducts. She pointed out that the 2.6% of her children who were dyslexic, and also had evidenced behavioral problems, were considered to not be representative of the general population of retarded readers because of the group's young age.

Fabian (1955) found that 10% of the group he studied were problem readers in an unselected sample of school children. He observed that one-third of this group of problem readers were being referred for child guidance-consultation. Almost two-thirds of the problem readers were foster children and approximately 83% among his sample were cited as maladjusted youngsters. Tomkins (1963) found that 75% of the young delinquents who appear in court in New York were two or more years retarded in reading. Equally important was the fact that 50% of these cases had a reading retardation of five or more grade levels below chronological expectancy. Critchley (1968) stated similar ratios in analyzing the delinquency rates of 12- to 16-year-olds in Paris, France.

Klasner (1972) states that general estimates of the proportion of severe reading problems among asocial youngsters range from 20% to no less than 83%. Wepman (1962), following a cause-effect point of view, warned that among potentially criminal, inter-city dwellers,

those individuals experiencing reading failures are most likely to become antisocial.

The most sophisticated of all civilizations, past and present, has cited the reading-writing skill as the most important basis of communication. Whether one is reading and evaluating highly scientific literature or is perusing menus, traffic signs, and advertisements, the ability to read pervades much of our daily life. The individual who is unable to decode and understand the symbols within his environment soon becomes one with feelings of inadequacy. This type of individual may resort to isolation and also more hostile and aggressive types of behavior. The behavior of chronically disruptive youth, then, is often traceable to the earlier stated paradigm of reading retardation-truancy-delinquency. Of utmost importance, then, is the identification and remediation of reading problems in their gestational stages.

Theories and Models of Reading

Before one can plan programmatic efforts to develop and maintain reading skills in chronic and disruptive youth, the worker in the field should be familiar with the various theories and models of reading acquisition. One of the most often quoted authorities is Dechant (1964) who lists the following multi-faceted characteristics of reading:

1. Reading is a sensory process. Reading requires the use of the senses, especially vision. The reader must react visually to the graphic symbols. The symbols themselves must be legible, the eyes must see clearly and singly, and the light must be adequate.

2. Reading is a perceptual process. Reading occurs when meaning is brought to graphic stimuli. It is a progressive apprehension of the meanings and ideas represented by a sequence of words. It includes seeing the word, recognition of the word, awareness of the word's meaning, and relating the word to its context. This is perception in its fullest sense.

3. Reading is a response. Reading is a system of responses made to some graphic stimuli. These include the vocal and/or subvocal muscular responses made at the sight of the word, the eye movements during reading, physical adaptations to the reading act such as postural changes, the critical and evaluative responses to what is being read, the emotional involvement of the reader, and meaningful reactions to the words.

4. Reading is a learned response. Reading is a response that must be learned by the child and is under the control of the mechanisms of motivation and reinforcement.

5. Reading is a developmental task. Developmental tasks have one basic characteristic: the child's readiness for them depends on the child's general development. Reading is a difficult task, and there is a most teachable moment for beginning reading and for each of the

specific skills in reading. The child's level of achievement in reading depends on his overall growth and development.

6. Reading can be an interest. Reading may become an interest or a goal in its own right. It then may motivate other activity.

7. Reading can be a learning process. Reading may become one of the chief media for learning. The child can use reading to acquire knowledge and to change his own attitudes, ideals, and aspirations. Genuine reading involves integration and promotes the development of the reader. It opens up to him a world of ideas, takes him to distant lands, and lets him walk side by side with the great sages of time.

8. Reading is communication. Reading is an active process. Communication from writer to reader occurs only if the reader can take meaning to the printed page. Without the reader, communication via the printed page is impossible.

According to Williams (1973), the basic models of reading can be categorized as: (1) taxonomic, (2) psychometric, (3) psychological, (4) linguistic, and (5) transactional. One will notice that all of the theories and models presented will have merit in some cases but total agreement among authorities covering all aspects of reading will probably not be found. As we will note in the remediation section, attention will be given to the chronically disruptive youth's individual learning style and possession of the various types and degrees of

cognitive regulators. A brief summation of the basic models of reading follows.

Taxonomic Models

The taxonomic model system is exemplified in the work of William Gray (1960). This model categorizes the skills underlying reading into four major classes: (1) word perception, which includes pronunciation and meaning, (2) comprehension, (3) reaction to and evaluation of ideas of the author, and (4) assimilation of what is read through a fusion of old ideas and information obtained through reading. Robinson (1966) expanded Gray's theory and added a fifth category, rate of reading, which can be adaptable to varying reading purposes. Also included in his writing was the differentiation of reading skills from process and from instructional procedures.

Psychometric Models

Holmes (1953) has been a significant researcher in the development of the psychometric systems. The substrata-factor theory developed by Holmes has since been elaborated and refined by Singer (1970). The substrata analysis consists of administering to readily disturbed youth those test variables that, on the basis of theory and past research, seem to contribute to most of the variance in reading comprehension. He then analyzed into secondary factors those which identify a set of subtest variables. These secondary factors are considered as the significant contributors to the variance of each of the

first-order factors. The major objective is to determine the nature of the combination of the hierarchically organized subsystems that form a working system for speed and power of reading. Clymer (1963) and Sparks and Mitzel (1966) have stated that the Holmes system does not constitute a theory per se in the true sense of the word, primarily on the grounds that it is nonpredictive.

Psychological Models

The basic psychological models associated with reading can be grouped into (1) behavioral, (2) cognitive, and (3) information processing. Behaviorally based models have been strongly influenced by Skinner (1957). Skinner's writing did not deal significantly with reading but has had an influence on the development of teaching techniques to enhance it. Skinner cites that reading behavior is described as vocal-verbal responses under the control of nonauditory verbal stimuli. Skinner cites automatic reinforcement of reading activity based on the reader's interest. Appropriate units of instruction are described as are discussions of the differences between the beginning reader and the skilled reader. Skinner's formulation of reading does not stress the nature of the written language as a code as he compares reading behavior with behavior and mimicry. According to Skinner (1957): "The automatic reinforcement of reading and interesting texts, however, has merely the effect of increasing the

probability of the occurrence of such behavior, it does not differentially reinforce correct forms at the phonetic level."

Staats (1968) is another leading proponent of the behaviorist point of view. His early work in reading was firmly entrenched within a strict operant-condition framework. The acquisition of reading according to Staats, Staats, Schultz, and Wolf (1962) is discrimination training with certain verbal responses reinforced in the presence of certain verbal stimuli. The emphasis at that time was on the development of a system of reinforcers--generally tokens which could be exchanged for trinkets and edibles. Additionally, a discrimination learning apparatus along with cumulative records indicating the number of responses acquired were present in terms of materials necessary. The basic reading materials used were simply single letters or consonant-vowel combinations which were chosen to reduce response variation. The acknowledgment that reading was a language process was ignored in his early work. The more recent work of Staats, however, has been modified. He sees basic elementary reading as a process of instrumental discrimination and he feels that traditional learning principles and experimental techniques using reinforcement contingencies are appropriate for the acquisition of reading and further study of the processes involved. Staats, Brewer, and Gross (1970) describe reading as a complex cognitive skill, many of whose components must be developed on the basis of already learned more basic skills including language repertoires.

Gagne (1970) presents still another approach with a "learning" emphasis rather than a behavioral orientation. According to Gagne, there are eight distinct types of learning ranging from signal learning to problem solving. Each is clearly distinguishable from each other for it begins with a different state of the organism and ends with a different capability of performance. A hierarchical formation is associated with these eight learning types and the prerequisite for one type is that learning of the next lowest type is already established.

Planning sequences of instruction involves examining the learning structure of various content areas. According to Gagne (1970) these are broken down into smaller units of student competencies. His sequences are not "developmental," for people of all ages learn simple kinds of learning. Rather, increasingly complex forms of learning build on simpler forms no matter what the age of the subject.

Gibson (1970) presents another cognitive-based model rather than a behavioral approach to the psychological model. The cognitive theory is quite comprehensive and elaborative. It is basically divided into phases. The first phase skills include those that are fundamental to learning to read, namely speech and the "graphic act." According to Gibson, for the normal child, written material was a second-order symbol system that decodes the speech; some competence in hearing and speaking must come first. Three aspects of language are stated as being significant: (1) the phonological, (2) the semantic, and (3) the syntactic. The youth must be able to extract the information from each

of these aspects of language. The youth clearly must acquire a knowledge of the phonological rule system. He must also develop a basic conceptual system including relations, that is, same-different. The child must also have fundamental knowledge of syntax and morphology. According to the authors, the fundamental "graphic act" is scribbling and the reinforcement for this activity comes from the opportunity to see the marks just made. The child develops awareness of graphic features, such as continuity, intersections, etc. The child will differentiate "writing" and "drawing" and then must differentiate the alphabet letters. This ability to differentiate two-dimensional forms increases with age.

A cognitive-based approach heavily orientated towards Piagetian theory has been offered by Elkind, Horn, and Schneider (1965). This provides a relatively sharp contrast to the behavioral model that was presented. Elkind concentrates primarily on the perceptual aspects of reading acquisition. His approach is based on the assumption that there are well differentiated stages of development and that the learning process or processes manifested by the child depends on his developmental level. According to Elkind, et al., (1965), it is first necessary to diagnose the level and then to determine what processes are associated with that level. One of the first things the child must learn is that printed text is a representation, like speech, and that the markings on the printed page are arbitrary signs. It is postulated that this awareness develops according to the same principles as does the

awareness of the arbitrariness of signs in general. The perceptual processes that account for this development of fundamentals leads to an understanding of the development of reading in general. Elkind, unlike many others, denies the importance of discrimination and association of that aspect of perceptual growth. He feels that the processes involved in perceptual growth are concerned with the basic development of "decentration," that is, the young child's perception is centered in the sense that it is determined by the dominant aspects of the visual field-continuity, proximity, closure, etc. With age, according to Elkind, et al., perception becomes increasingly decentered, that is, freed from the domination of the field effect.

Elkind, et al., (1965) see all of the perceptual processes as embodying logic. These processes include (1) perceptual organization (the ability to rearrange mentally a stimulus array without acting physically on it), (2) perceptual schematization (the ability to organize parts and wholes so that they retain their unique identities without losing their independence), and (3) perceptual exploration (the ability to scan systematically an array or a figure so that all its features are noted). Elkind (1967) has criticized look-say instruction on the grounds that it inhibits the development of a true whole-part schematization since it provides no training on analyzing parts of words.

Venezky and Kelsay (1970) present a model for skills reading that falls clearly within an information-processing framework. Visual scanning, the first of several postulated processes, is directed by

(1) general knowledge of the reader and (2) immediate knowledge from the material being read. According to the authors there are two types of immediate knowledge: what is deduced from the materials and thus creates expectancy, and what is obtained from what the eye is at that moment processing. There are two (simultaneously operating) forms of processing: syntact semantic integration of what has just been scanned and forward scanning. Forward scanning is directed at the task of locating the largest manageable unit, the largest unit that can be chunked rapidly. The reader of the materials notes punctuation, for example, or phrase boundaries. When this unit is identified, forward scanning continues and the information of the unit already identified is then integrated or related to what has previously been stored. A word is identified via search of the associative word store, which contains frequently encountered words and word parts, and of the low frequency store (larger and less well organized). Using partial information on expectancies, matches are attempted. If there is a failure, more scanning is necessary. The good reader scans well; that is, he maintains a good balance between the two processes of integration and forward scanning, which must adapt to changes in the type of reading material and in the reader's purpose.

In terms of this information-processing model, the nonreading six-year-old would have an empty letter store, no visual patterns in either word store, plus knowledge of language in the real world. Input to the model would be first letterpairs, then words, etc. There is no

distinction between integration and forward scanning in early stages of learning to read. The authors note, however, that important developmental changes in abilities may complicate the issue, and they pose some general questions about the actual nature of the relevant cognitive processes and their acquisition. Kelsay, Chapman, and Venezky (1971) have developed a basic skills test consisting of a large set of subtests related primarily to the three primary areas of the acquisition model described. These subtests were designed to sample a skill in a variety of different contexts. An attempt is made to identify the underlying psychological processes involved in the ability. Five areas of cognitive functioning are tested: matching of visual forms, auditory-phonetic identification, letter-sound association, vocabulary knowledge, and general achievement. Preliminary results indicate that skill components, if narrowly defined, are quite independent. Performance on auditory matching and segmentation and corresponding learning tests was poor. Visual perception skills are reasonably good, but cognitive abilities such as sequencing and memory for visual forms were not good.

Other researchers involved with the information-processing point of view include Roberts and Lundser (1968). Their writings point out that language has a dual character. It is representational and communicates meaning, and it is also behavioral. It also includes a complex of skills that is comprised of a set of symbols which are interrelated in complex ways. Their units of different sizes and arrangement

of these units comprise the grammar. It has been stated that linguistic behavior involves concurrent activity at three levels: representational (semantic), grammatical, and perceptuo-motor (phonological). The establishment of reading skill depends on the acquisition of a high level of automatization at all three levels in relation to their interpretation of the written text. Reading is done in order to obtain information, or in other words, to reduce uncertainty. Information is also the effect of generating new uncertainty, so there is a cycle of uncertainty-information-new uncertainty.

Roberts and Lundser (1968) present a complex schematic representation of processes involved in reading, stressing their hierarchical and sequential relations. The importance of motivation is cited which is extraneous to the reading skill itself. The remaining elements represent decision processes of strategies, perceptuo-motor mechanisms, and active memory states or processes.

Another version of the information-processing point of view has been cited by Smith (1971). Like other theorists working within this framework, he concentrates on a description of the skilled reader. Smith's feature-analytic model proposes that (1) letter identification, (2) word identification, and the (3) comprehension of meaning are three distinct tasks that can be performed independently on the same information. The identification of a single letter is achieved as a result of testing a sufficient number of features so that alternative responses are eliminated and uncertainty is reduced. Agreeing with Neisser (1967),

Smith suggests a word identification is not necessarily based on prior letter identification. Rather, distinctive features directly provide the basis for word identification. In fact, according to this model, fewer visual features are required to discriminate a letter within a word than to discriminate a letter in isolation. By the same token, word identification can take place when there is insufficient information for identifying any of the individual letters; word feature lists include information about location of feature.

Smith (1971) cites the concept of comprehension in the information-processing model. Comprehension of meaning is based on the same kind of feature analysis. The skilled reader uses information from the visual configuration plus information from context (for example, he has knowledge of semantic and syntactic constraints). Comprehension of meaning then will require less information than does word identification and, consequently, it perceives word identification in normal skilled reading.

An interesting and yet valuable contribution by Smith is his analysis of how the information-processing capacities of the novice reader are taxed to a much greater extent than are those of the mature reader. According to Smith (1971) the beginner cannot often identify words and meanings directly. Instead, mediated identification is required. Mediated word identification involves mapping the word onto its sound pattern, which is then used as a basis for the identification of the word. Phonics rules are taught in order to maximize the translation

from a visual configuration to acoustic configuration. In mediated meaning identification, word identification must occur so that there is a basis for comprehension. These mechanisms are disruptive because they overload the visual information-processing and memory systems. The beginner must learn to overcome these restrictions by utilizing the redundancies in written language (feature redundancy in individual letters; orthographic redundancy). Until the beginning reader accomplishes this task, he must rely more heavily on the visual information that he picks up; therefore, he will read more slowly and with less comprehension than he will after he has learned to use the redundancies.

Linguistic Models

The major limitation of the models presented to this point is that there appears to be an underemphasis on the structure of language. It is noted that there are statements in the literature within the previously presented models that reading is a language process. The major emphasis, though, is in terms of the psychological rather than the language structure variables.

The application of linguistics to reading was until recently fairly restricted. Bloomfield (1942) posited that irregularities in correspondence between orthography and speech should not be presented to beginning readers but that only regular correspondence should be presented. Fries (1963) was also concerned primarily with letter-sound relationships. Lefevre (1964) was among the first to point out

the importance of syntactical cues, both intraword, such as inflections, and interword, such as sentence structure. One of Lefevre's major interests was in the cueing of intonation.

Great emphasis was placed on the difficulty in reading English because of its irregular grapheme-phoneme correspondence. Levin and Watson (1963) argued that a child should be trained on achievement variable correspondences from the beginning so that he could develop a "prospect for diversity." Venezky and Weir (1966) demonstrated that there is considerable regularity between English orthography and oral language if one looks beyond the direct grapheme-phoneme relationship. The relationship between print and sound must be described in two steps. First, there are rules deriving lexical forms from the graphic input; and secondly, there are rules deriving the phonemic form from the lexical data. Chomsky and Halle (1968) also analyze the relationship in two levels, but for them these levels are the lexical and the phonetic. According to Chomsky and Halle, orthography is a nearly optimal representation of the lexical level of spoken English.

Recent notions about language development, especially as it has been described by those who work within the transformational grammar framework, have been of great interest to people working in reading. The rejection of passive, receptive learner for one who is actively constructing his language (on the basis, it is sometimes argued, of innate knowledge of linguistic universals), the distinction between competence in performance, the analysis of grammatical structure--

these and other ideas have to lay the foundation for reading models that have a strong linguistic orientation.

Goodman (1970) has been influenced greatly by a transformational-generative theory. According to this author, reading is a constructive process involving active information processing. The reader knowledgeable about language brings his total experience to the reading task. Reading is a psycholinguistic process in which the reader decodes from the graphic stimulus not speech, but directly into the deep structure of the written material. In oral reading, he then encodes the meaning into speech. Since comprehension and communication are the goals of reading, the proficient reader may recode into the speech that contains transformational vocabulary and syntax with modification and meaning. Three kinds of information are used simultaneously--graphic, syntactic, and semantic. As reading proficiency improves, the reader, who has more control over language structure, better conceptual skills, more experience, and better sampling strategies, uses fewer and fewer graphic cues. Goodman argues that one cannot fractionate the reading process into component skills, either for research or for instruction, because the reader does not even use all the information available in the text. He uses only enough to predict and decode the language structure.

Goodman's research is to look at "miscues" in reading. Miscues are occurrences of mismatches between the text and the reader's response; they are not errors because some very good

reading may involve miscues where meaning, of course, is not disturbed. Analysis of the miscues will lead to an understanding of the reader's strategies and, in fact, instruction should be designed to maximize the sampling and hypothesis-testing strategies, rather than to try to get the child to attend to more specific details of the text.

Clay (1968) and Weber (1970) have also investigated errors in oral reading. In general, studies indicate that most readers, even beginners, depend heavily on syntactical constraints. Fewer miscues are interpreted as being due to misperception of the graphic stimuli themselves. Goodman's (1968) study of six first-grade readers over the course of eleven months indicated uneven development in strong individual differences. In general, however, the more proficient children made "better" errors, that is, they demonstrated more complex processing and they showed more ability to correct their errors when they conflicted with their expectancies of meaning/language. Thus, language does control reading to a large extent. Goodman's model presumably operates both for the beginner and the proficient reader, but one must not assume that the processes are the same. The model is complex and it can be broken down into several alternative submodels so that it would represent the beginning reader versus the skilled, or it could account for the differences in the individual reader as it would occur as he read materials of different levels of difficulty.

Ruddell (1970) has presented a model of communication that includes speech, writing, and listening. Using a transformational-grammar framework, language is seen to operate on several levels. First, there is a surface structure consisting of the relationship between morphophonemes and morphographemes. The second level consists of structural and semantic readings that lead to processing language for interpretation. The third is a deep structure of language. The first level is important in considering the decoding process; all three levels are relevant in determining comprehension. According to Ruddell (1970), decoding is one of the central tasks in early reading instruction. He notes that children manage to pick up decoding skills from a vareity of approaches, many of which stress quite different units. He speculates that there may be a relationship between the optimal unit for instruction and particular learned characteristics. The comprehension process involves relational meaning, both at the surface structure level and at the deep structure level. In addition, lexical meaning, including the importance of context in determining semantic possibilities is important. The model also takes into account an individual's interest, attitudes, and values, and his cognitive strategies. As reading progresses, a child goes from learning the nature of the code of the writing system to learning to decode. As cognitive strategies develop, he should gain alternate ways of handling print besides decoding words. With a greater proficiency, the reader

may move directly to meaning, relying less and less on the morphological system.

Ryan and Semmel (1969) stress the transformational-grammar framework and the fact that the child must have some degree of knowledge of grammar in order to take advantage of the irregularities that exist on an abstract level. They argue that the beginning reader has, and uses to some extent at least, abstract rules about language structure. He should be trained so he can use what he knows about language structure. The youth should be taught so he can use the rules he knows about language even more effectively in his reading. Instruction should stress the conceptual aspects, concentrating on the perceptual aspects, which would lead to absolute identification of letters and words, which would interfere with mature reading strategies.

The reading models based on psychological theories, which seem to represent all points of view about the nature of learning and development, comprehensive models based on linguistic analysis seem to be found solely on transformational-generative grammar.

Transactional Models

The transactional model of reading has been cited by Rosenblatt (1969). Adults' reactions to poems were studied in his research. The quality of experience that the reader is living through, under the stimulus of the text (the poems), is the goal of the reading. According to Rosenblatt, there is an active, two-way relationship between the

reader and text. The "transaction" terminology underscores the importance of both elements in a dynamic relationship. The active seeking out particular aspects of the text and the tentative interpretations and reinterpretations makes analysis closely related to the more typical cognitive point of view.

Williams (1973) succinctly summarizes the present state of the art in terms of reading models:

1. Models at present focus on cognitive aspects of reading; little attempt has been made to incorporate affective aspects into the model.

2. Several different theoretical positions within psychology, representing a wide variety of points of view, have been used in the development of models of reading, whereas transformational-generative grammar is the only theory from linguistics that is represented in the recent attempts at comprehensive model building.

3. There seems to be a rapprochement among theorists toward a view of reading as being both a complex cognitive skill, the goal of which is obtaining information in the complex language system.

4. Most models focus on the reading process per se. This is due in large part, of course, to the theorists' specific interest in skilled reading. However, the emphasis on proficient reading is also a result of the opinion that in order to understand the acquisition process, we must first study the skill as it appears in final form.

5. Most models of the acquisition phase focus on decoding prerequisite abilities. The mechanisms involved in making correspondences between orthography and sound cannot, however, be characterized in terms of associative learning. Rather, basic knowledge is intimately involved as well as the utilization of complex active and perceptual strategies.

Correlates of Success and Failure in Reading

Chronically disruptive youth, like other individuals involved in the process of reading, can be involved in an active rather than a passive reading experience. Reading is not a single process but it is the synthesizing of many processes culminating in a single act. The main purpose of this section is to point out some of the basic research conclusions and relate them to the total reading process of the chronically disruptive youth. Chronically disruptive youth, as with non-handicapped children, can be viewed along various dimensions. Before we review the more frequently encountered correlates of reading ability or lack of it, we must agree that chronically disruptive youth will follow the total continuum and ranges of behaviors in all of the categories mentioned with the exception of the variables related to social adjustment behavioral characteristics which will obviously be low.

Variances within the stated correlates of reading ability may be related to the exhibited behaviors of chronically disruptive youth. Among the more frequently encountered correlates of reading ability are: (1) intelligence, (2) mental age, (3) sex, (4) socioeconomic level, (5) language, (6) race, (7) personality, (8) attitude, (9) physical growth, (10) perceptual skill, and (11) rate of learning. This listing represents only a few of the major reading correlates. Brief comments will be made about a select few of the more important ones which appear to have more significance in studying the reading process of chronically disruptive youth.

Intelligence Quotient and Mental Age

The terms intelligence quotient (IQ) and mental age (MA) are usually used to express the results of tests of general intelligence. The IQ of a 12-year-old youth represents the ratio between his particular score on a given intelligence test and the score which an average individual of his exact chronological age would attain on the same test. In differentiating between MA and IQ, one might state IQ is a measure of mental growth, whereas MA might more appropriately be described as a level of mental maturity. Although there are exceptions, IQ's are generally thought to remain relatively stable as the individual grows older. MA, on the other hand, tends to increase at a rather constant pace until sometime in mid-adolescence.

Consequently, MA seems to be a better short-range predictor of performance while IQ is more appropriate for accurate long-range prediction.

In viewing the IQ's and mental ages of chronically disruptive youth, from a quantitative and qualitative point of view, the writing of Mauser (1974) has cited that the average IQ of delinquents was 95. This quotient falls within the national norm of average intelligence. Schlichter and Ratcliff (1971) compared 45 juvenile delinquents and 45 nondelinquents participating in a learning discrimination study. They found no significant difference in IQ levels. Ahlstrom and Havighurst (1971) who conducted a longitudinal study that included black delinquents and white delinquents found that the average IQ for black delinquents was 91 and the average for white delinquents was 94.

Although there is general agreement that intelligence is an important factor in developing reading proficiency, educators are divided about the extent of that importance. Over the years of all the factors correlated with reading readiness and achievement, none has been more persistently or frequently studied than intelligence. This amount of knowledge and conflicting information about the importance of intelligence has tended to compound rather than clarify the issue. Some of the more pointed statements in the literature related to the importance of intelligence include Harris (1970) who stated that ". . . the most important single factor in reading readiness is general intelligence, which, being an average of many phases of mental growth,

is significantly related to most of the other factors." Similarly, studies by Witty and Kopel (1936) concluded that an individual with a Binet IQ below 25 ordinarily will never reach a level of mental development sufficient to learn to read. Those individuals with an IQ score below 50 will experience difficulty in reading both abstract and other types of difficult material. Those individuals with IQ scores between 50 and 70 may ultimately be able to learn to read but probably never above a fourth-grade level. Whether the findings of Witty and Kopel (1936) are applicable today as they were in years past is doubtful. It is predicted that many interesting and surprising results will be reported related to the teaching of severe and profoundly retarded individuals' reading and mathematical skills.

Bond and Wagner (1966) cite that the relationship between intelligence and reading abilities will vary from academic level to academic level. Specifically, it was stated that the correlation between mental age is measured by individual Stanford-Binet tests and reading comprehension. The end of the first grade is approximately .35; at the end of the fifth grade it is approximately .60; during the high school years it approaches .80. Cohen and Glass (1968) found no significant relationship between IQ scores and reading ability in the first grade, but they found a significant relationship in the fourth grade.

In terms of chronically disruptive youth, it is shown that the majority of the identified students will be in the upper primary and

intermediate levels. The fruition of the frustrations of such youngsters will probably culminate in the junior high or early high school years.

The importance of an adequate mental age in beginning reading is often noted. Morphett and Washburne (1931) conducted a classic study which pointed out that youths whose mental ages were below 6 when they entered school usually failed the first grade. This study also reported that the proportion of failures dropped as mental age increased up to about 6-1/2 years. In the same era, Gates (1937) disagreed with the Morphett-Washburne findings as he stated that other factors may be as important as mental age. His research indicated that the necessary mental age for reading is relative. He cited that class size, teaching procedures, and methods allow some children to read as early as age 4-1/2, where others may begin to read as late as age 7. Gray (1956) also supported the mental age of 6 concept for beginning reading. He did state that materials, teaching procedures, and a variety of other factors may be more important than mental age. Gray (1956) noted that several European countries and Scotland had developed successful readers at the mental age of 5. One must caution interpreters of these results unless they analyze the language structure and symbolic structure of reading materials that are used in countries and environments reporting reading success at mental ages of 5 or below.

In summary, although there is conflict of opinion about the exact nature of the relationship of IQ and MA to reading, certain points of

agreement can be found that will have implications for working with chronically disruptive youth.

1. IQ and MA are relatively good predictors of a child's minimal performance level. Barring other serious handicaps, most children with mental ages of 6 can be taught to read at the first-grade level.
2. Most students who failed to succeed in reading in the first grade have mental ages below 6 years.
3. Although IQ and MA are important, other factors such as class size, procedures, motivation, and teaching procedures may be just as important to successful reading importance.
4. Even though IQ and MA are relatively sound predictors in most cases, they should never be used in isolation to determine expectations. The fact that a first grader has an IQ of 130 is no more of a guarantee that he will learn to read than is the fact that a child with an IQ of 80 will not.
5. Correlations between IQ and reading scores tend to increase with age and grade level of the student. This is due largely to similarities in test items of the measuring instruments administered to ascertain supposedly different skills or traits. A high IQ score at the sixth-grade level is a much better predictor of reading performance than is the same score at the first-grade level because of the greater amount of nonverbal items included on the test for children at this lower level.

Socioeconomic Factors

One of the significant factors most often correlated with reading achievement has been socioeconomic status. Chronically disruptive youth may be members of any socioeconomic class, but it is estimated that the majority are from lower socioeconomic homes. Assuming that the greater number of chronically disruptive youth will be members of the lower socioeconomic class, it is also understandable that there would be greater problems of reading, regardless of other factors. Early studies by Coleman (1940) and Gough (1946) cite a high relationship between socioeconomic status and reading ability. Riessman (1962) offers the rather conservative estimate that 15% to 20% of American school children have some degree of reading disability. His estimates of the number of reading disabled individuals, who are members of the lower socioeconomic classes and particularly the disadvantaged subpopulations, raised the incidence figures to 50%. Benson (1969) stated that the number of children with retardation in reading include 10% to 20% adheres in the middle classes, but in most lower socioeconomic areas it may range as high as 80%.

The chronically disruptive youth who does come to the educational environment from a home with malnutrition, poor health, crowded living conditions, unstable environment, and economic pressures undoubtedly will be at an extreme disadvantage. These are problems that the teacher will have very little control over.

Additionally, though, there are a number of other reasons for poor achievement which may be associated with socioeconomic status. These additional factors may be discussed under the headings of (1) background experience, (2) level of motivation, (3) language.

Background Experience

Chronically disruptive youth who do come from low socio-economic levels are often said to lack academically relevant background experiences. All children including chronically disruptive youth have extensive background experience. The fact that their experiences are not the same as those of middle class children or those represented in traditional teaching materials should not be misinterpreted as irrelevant to the academic experience. Many teachers have overlooked the fact that experiential backgrounds do exist in these children, and these same teachers have failed to capitalize on the wealth of nontraditional experiences the child brings to the learning situation.

Chronically disruptive youth, hence, are handicapped in many cases by their background experience. Since the educational system is geared toward middle class standards with middle class subject matter and vocabulary, the child who has never experienced these is at a disadvantage. Again, the chronically disruptive child from the lower socioeconomic class has fewer opportunities to travel, less books to handle, fewer magazines in his home, and also fewer opportunities to

meet people outside his immediate environment. Because of restricted social environment and economic limitations, many avenues of enrichment are closed to him. Frequently in the home of the chronically disruptive youth, both parents work and there is little opportunity for them to contribute to widening the child's experiences. In many other cases, because of social and economic pressures, parents simply contribute to additional neglect of the child. Consequently, this child may be attitudinally unprepared to accept the changes that accompany school. The author cautions that not all chronically disruptive youth come from negative environments and advises that teachers be prepared to handle the unique problems of the more affluent youth included in the chronically disruptive category.

Level of Motivation

To assume that all chronically disruptive youth want to learn to read is unrealistic. Many chronically disruptive youth come from homes in which the parents cannot read or feel reading is unimportant; therefore, the motivation for learning to read may be lacking. Again, this is especially true of the chronically disruptive youth from low socioeconomic environments. They are less likely to see their parents or other members of their family in peer groups placing importance on reading and its related activities. Also, they are less likely to have opportunities to examine books, magazines, newspapers, etc., in their

homes. They have neither the encouragement nor any reason to learn to read.

Past reading experiences for chronically disruptive youth have oftentimes been unrewarding experiences. This fact alone may be regarded as a significant point related to the reason why the children and youth are poorly motivated in the reading environment. The inadequate backgrounds that many of them come to school with deter levels of readiness. Because many of the chronically disruptive youth come to the learning environment ill prepared, they fail and reading too often becomes equated with failure. Few, if any, individuals enjoy failing, so it is not surprising that negative associations are built up and associated with the school and reading related activities. Rather than motivating children to read, constant failures motivate them to leave school and to assume the street behaviors of chronically disruptive youth. A later chapter will describe materials that contribute to the positive motivation of chronically disruptive youth in the learning situation.

Language

Another significant area related to the reading ability of chronically disruptive youth is language. Students from low socio-economic environments are oftentimes handicapped by their language and language patterns. This is not always the case but it does seem to surface more frequently in studying students from low socioeconomic

environments. Chronically disruptive youth may often come to school with a language quite adequate for communication with his family and peers. This is not sufficient for the traditional school setting. The language of the home and community may not necessarily be the language of the school. Bernstein (1960) and Patin (1964) cite the "public" or "restricted" language that low socioeconomic students possess restricting the amount of "formal" or "elaborative" language consistently utilized. The student's public language is adequate for conveying simple items of information, making requests, or indicating agreement or disagreement. The "public language" is characterized by simple declaratory sentences in imperative spirit. Structural complexities, dependent clauses, and more elaborative speech patterns found in "formal language" are not in his public language. Since the language of the school is formal, the student from a low socioeconomic group is at a disadvantage from the beginning. Chronically disruptive youth, again, come to the educational environment in many cases shortchanged with an insufficient repertoire of language skills.

Reading as a Sensory Process

No matter how intelligent the chronically disruptive youth may be, or how psychologically ready the individual may be for reading, he cannot learn to read unless he has some way of experiencing the

stimulus material. Reading begins as a sensory process. The cues and stimuli for reading come in through the ears, eyes, and in the case of the severely visually impaired, through braille, and the fingers. The chronically disruptive youth, if visually handicapped, will have additional burdens that may prevent him from progressing in reading. To say that a chronically disruptive youth who is also visually handicapped will not learn to read would not be a true statement. Chronically disruptive, as other youth, have the remarkable ability to compensate. The proper interpretation should be that impairment in vision or hearing alone should not impede progress in all cases. Reading is a sensory process, but we do not intend to mean that it is only a sensory process. There are many factors involved in reading. Disability is usually the result of a multiplicity of factors, some working singly or in combination. Visual weaknesses or hearing problems alone may not cause severe problems for the chronically disruptive youth, but it must be stated that he will rarely find either one standing in isolation. Most often they join with, or cause, other problems such as fatigue, restlessness, discomfort, poor self image, etc., that may propel them into their maladaptive behavior performance.

Reading and Vision

Dzik (1966) has been one of the foremost researchers primarily focusing on vision and the juvenile delinquent. He states that 85% to

90% of the students learning is through eyesight and vision. Consequently, if his vision is poor, his chances of success in the classroom are very poor. In his examination of 125 juvenile delinquents, he found that 94% were reading below their school grade level. Significant was that 54% failed the far-sighted vision test, 48% failed the near-vision test (14 inches), and 35% of the juvenile delinquent population failed both far and near. Additionally, 53% failed perception (getting meaning from seeing) and 72% failed either one or more of the vision tests.

Reading begins with seeing--stimulus enters through the eye. At an early age children begin to perform in a way that might loosely be called reading. The child begins to recognize that certain signs or symbols represent names of things. Later on they learn that when certain signs and signals are put together, they represent talk. They begin to recognize and interpret billboards, road signs, labels, and the like. Reading books and printed materials is another matter. The question is often asked: "When are they ready to read such materials?" It might be better to state the question as: "When is their vision ready?"

By the time the child reaches the age of 5 or 6 he is usually visually ready for reading books. At this age he has reached some competency in binocular coordination, depth perception, focus and re-focus, and changing fixations at will. Optometric research has indicated, though, that at this age he is generally far-sighted. Since children are individuals with individual patterns of growth and

development, there are likely to be considered differences between pupils in any group of children.

Refractive errors are the most common type of visual disability. The child with a refractive error simply has eyes that are out of focus. Many first grade children suffer from various degrees of one type of refractive error or another. Hyperopia (far-sightedness) is one type. Since many schools still use the Snellen-type wall chart for testing vision, so consequently many children are missed because this test does not measure near vision. The child with far-sightedness will be able to focus on objects, wall charts, blackboards, stop signs, and other large objects that he may experience, but will have difficulty when required to read from a book.

Myopia (near-sightedness) is the second type of refractive error. Myopia is less common in beginning readers and, except in extreme cases, appears to have little detrimental effect on reading. Some authorities feel that moderate myopia favors, rather than hinders, reading. Most reading first graders read at a distance of 14 inches which is well within arm's reach and is unlikely to be a problem with beginning readers.

Astigmatism, the third type of refractive error, is a condition of uneven focus of the eyes. A stigmatism may be present in addition to hypermetropic and myopic conditions. A stigmatism is not necessarily a major cause of reading disability but can be a contributing factor. As with other types of refractive errors, it tends to create

discomfort, tension, and disinterest in reading. The chronically disruptive youth who possesses refractive errors will have additional sources of internal and external discomfort because of these vision problems.

Inadequate conversion and fusion deficiencies are also types of visual problems but are much less frequent. It will generally take someone more highly trained to detect these problems. This fact alone gives credance to the recent plea by optometrists that thorough visual analysis should be made prior to entering any educational setting.

Diskan (1963) and Knox (1953) have presented iists of symptoms that are regarded as reliable for picking out visual defects that may eventually contribute to reading problems. Included in the list of symptoms: (1) facial contortions, (2) book held close to face, (3) tension during visual work, (4) tilting head, (5) head thrust forward, (6) body tense while looking at distant objects, (7) assuming poor sitting position, (8) moving head excessively while reading, (9) rubbing eyes frequently, (10) avoiding close visual work, and (11) losing place in reading. According to the authors, these overt symptoms combined with results from a screening test appear to be relatively good indicators of vision difficulty. Visual difficulty and consequently difficulty in reading printed materials results.

As implied earlier, there are many studies suggesting no relationship between visual defects and reading disabilities. Among these are the Witty and Kopel (1936) study, Betts and Austin (1941),

Ball (1961), and Shearer (1966). On the contrary, Park and Burri (1943) stated that better readers had fewer than average visual deficiencies for their chronological and mental age groups. Poor readers had more than average visual deficiencies for their chronological and mental age groups. Betts (1934) and Spache and Tillman (1962) cited that fusion is directly related to reading problems. Additionally, studies relating reading disability and visual deficiencies include the research of Harris (1970), Kephart (1953), Eames (1965), and Dearborn and Anderson (1938).

Visual defects should be regarded as a possible cause, a possible contributing factor, depending on the individual. It may be totally unrelated to the reading performance of chronically disruptive youth. However, all vision should be checked by a screening device, with a referral system for those who fail the screening.

Reading and Hearing

The ability to hear sounds accurately is regarded as essential for learning to read efficiently. Durrell and Murphy (1953) state that almost every child with reading achievement below the first grade was handicapped with a marked inability to discriminate sounds and words. Bond (1935), in addition to Goetzinger, Dirks, and Baer (1960), conducted studies involving the matched pairs technique in an effort to determine differences in the performance of good and poor readers on selected auditory skills. Significant differences were found in each

study between the two groups of readers in auditory discrimination. Thompson (1963) in a study of second graders found that of the 24 best readers, 16 possessed adequate auditory discrimination upon entering the first grade. Of the 24 poorest readers, only 1 exhibited adequate discrimination skills at the beginning of grade one.

Low correlations between reading readiness skills and selected auditory skills in first-grade children were found by Gates and Bond (1936). Additional research questioning the relationship of auditory skills to reading ability was cited by Reynolds (1953) and Templin (1954).

Although the research related to auditory skills and reading is inconclusive, it is felt by this author that it does have a significant role to play, especially when reading instruction in certain instances will rely on some sort of phonics or oral system of sounding out words. Whether the difficulty in hearing is due to physical reasons or due to cultural-dialectical differences, hearing ability will definitely influence the child's language and reading.

Cozad and Rousey (1966) studied the hearing and speech disorders among delinquent children. More than 5 times the normal incidence was reported. Additionally, there was a higher incidence of defective hearing among the boys than the girls. Speech disorders which are at times related to hearing disorders occurred nearly 12 times the normal incidence among delinquent youth. The incidence of speech disorders is high in all the categories rather than focusing

specifically on articulation, stuttering, or other types of speech problems.

The beginning reader should be able to hear likenesses among letter sounds as they occur in words. The ability to detect words that begin and end with the same sound is also important. Rhyming ability and the ability to determine words containing a given sound are also felt to be very important. It is the feeling of the author that those children who cannot perform these tasks can be trained to do so. In those cases where auditory training is unsuccessful, a program emphasizing phonics approaches should not be implemented.

In summary, the chronically disruptive youth with a hearing disability may or may not be significantly impeded in reading achievement. As stated earlier, this is an individual problem and will be affected by the specific instructional model presented to the individual.

Assessing and Evaluating Reading Growth of Chronically Disruptive Youth

It is of great importance that chronically disruptive youth be thoroughly evaluated in an effort to provide the most direct and beneficial educational program. This section deals with some of the techniques that can be used to assess the cognitive reading achievement of chronically disruptive youth including: (1) group and individual tests--standardized and informal, (2) attitudinal measurement, and (3)

criterion referenced tests for functional literacy. It is our purpose to explore a variety of procedures that will give us an intelligent estimate of the level of materials which individual students can read successfully. Careful and continuous evaluations of reading abilities and disabilities cannot be overemphasized. Through continuous evaluation, program direction may ultimately evolve from a remedial to a compensatory type of program. Evaluation of chronically disruptive youth in the reading area will not only be concerned with the individual skill development but also the effect of reading instruction on the student's attitudes and reading habits.

Cognitive reading achievement can be measured by both standardized tests and informal (nonstandardized) instruments or techniques. Standardized tests are especially valuable in helping us compare our students' reading achievement with that of [illegible] in a national norm group. Informal reading tests are especially valuable in determining which of our available materials are best suited to the needs and achievement of individual students in our classes. By using informal tests, we can determine which of our available materials are on a student's frustrational reading level, which are on his instructional reading level, and which are on his independent reading level.

Materials that are on a student's frustrational reading level are normally too difficult to read even with the help of a teacher. Materials that are at this instructional reading level are suitable for him to read if he has guidance from a teacher. Materials on his

independent reading level are easy enough for him to read on his own. It is imperative that chronically disruptive youth, as other students, will receive reading materials, textbooks, etc., at his instructional level. Instructional level materials generally are under the guidance of the teacher. Other materials such as supplementary materials which the student reads with little or no guidance from the teacher should be at his independent reading level. Only rarely and only when the student is intensely motivated should the student read materials at his frustration reading level.

Standardized Reading Achievement Tests

The number of different reading achievement tests on the market is large. Buros (1972) has provided a valuable service by periodically soliciting reviews of the various tests from reading specialists and included them in a collection of reviews of mental measurement instruments. Mauser and Dembinski (1974) have described over 200 assessment protocols suitable for use in the assessment and diagnosis of learning disabilities in children. Few of the reading achievement tests will be described in this section as the number of tests is too large to do an adequate job. Regardless of which standardized reading achievement tests are used, Smith and Barrett (1974) have outlined very distinctly some very practical criteria and questions related to standardized achievement tests:

1. Are the students who were used to gather normative data similar to our students and therefore likely to provide helpful comparisons?
2. Are the reading passages on the test good representations of the kind of reading material that the student must learn to read?
3. Are the tasks students are asked to perform good representations of what a good reader does when he is getting meaning from print?
4. Are the comprehension questions asked of students carefully constructed to measure different levels of thinking about significant aspects of the content of the material?
5. Are the strengths and weaknesses of one particular test in regard to the strengths and weaknesses of other available tests?
6. Is reading rate always measured as a rate of comprehension? A rate of reading score that does not take comprehension into consideration is meaningless.

One of the most common types of information that the teacher of chronically disruptive youth has is the individual's IQ. If you have IQ scores for your students, you have available the information to approximate how well each student should be reading:

(Bond & Tinker, 1967) Reading Expectancy Grade =

$$\frac{IQ}{100} \times \text{years in school} + 1$$ or

(Harris, 1970) Reading Expectancy Grade =

$$\frac{2\,MA + CA}{3} - 5.2.$$

With this information, you now have only the individual's reading expectancy grade. You do not know the actual reading grade level of each student. Probably the best way of finding the reading grade level of a student is by administering a standardized reading test and using the grade scores supplied by the publisher. This appears to be a very simple task. However, the more you examine the many standardized reading tests available for your use as well as the interpretations of grade scores supplied by publishers, the more complex your decisions become.

Different reading abilities are measured when we use different reading tests. There are two major categories for classifying reading tests: oral and silent. Some reputable oral tests measure only oral reading (no comprehension questions are asked). Obviously, different types of reading ability are being measured when students take such a test and when the student takes a silent reading test in which he is asked to indicate synonyms or antonyms for words as well as to respond to study, skill, and comprehension questions.

To get the maximum amount of usable information from a reading test, a wise and selective choice of tests must be made. As a teacher of chronically disruptive youth, you must ask yourself what you most want to know in relationship to a student's reading achievement. Standardized group tests are helpful to the teacher because they provide information on every child in this class. Achievement batteries such as the Iowa Test of Basic Skills (Spitzer, 1964) and the Stanford

Achievement Test (Kelly, et al., 1964) can be used as initial screening devices. These tests usually give an estimate of general reading level and subscores in such areas as vocabulary, deriving paragraph meaning, and study skills. These tests do not identify specific strengths and weaknesses in reading. It is often a good idea to study the errors of individual youngsters to obtain some specific information on his performance. Many errors of the same type can alert the teacher to a possible problem. Unfortunately, a teacher seldom has time to do such detailed studies for every child in his class.

Group tests that focus specifically on reading include the Gates-MacGintie test (1964) or California Reading Test (1963). The administration of a reading test to those youngsters who have unusual results on their achievement battery can provide additional evidence to confirm or refute the additional scores. In most cases, reading survey tests are longer than the reading section of general achievement batteries and thus sample more reading behavior. Because of their greater length, they usually measure more consistently and are advisable in assessing the general reading abilities of the chronically disruptive youth.

Group diagnostic tests such as the "Stanford Diagnostic Reading Test" (Karlsen, et al., 1966) and the "Bond-Balow-Hoyt Silent Reading Diagnostic Test" (1955) provide additional screening instruments. An example of a test to analyze specific skills in reading is the "McCullough Word Analysis Test" (1963). It must be noted that the previous tests mentioned do involve a great amount of time and cost of

administration, scoring, and interpreting such tests. It is cautioned that not all youngsters in the chronically disruptive category will need this degree of analysis.

Individual Reading Tests--Oral and Silent

Some individual instruments are primarily oral tests; others have an oral reading section but contain additional sections that enable the examiner to gather additional specific diagnostic information. If you would like to know how well your students compare with students nationally in oral reading, you might want to give a good oral reading test. If you've been trained in giving an oral reading test, you may also be able to derive valuable diagnostic information from it. By observing a student's error patterns, you can set up a program for correcting his oral errors. Thus, you might look at such behavioral characteristics as:

1. Mispronunciation--Are there patterns to his mispronunciations? Are there syllabication errors, certain types of errors, principally in word endings?
2. Substitutions--Does he misread words, usually putting in a synonym for the word given by the author?
3. Omissions--Does he skip words?
4. Insertions--Does he include words that are not in the passage?
5. Regressions--Does he repeat words or phrases?

6. Hesitations--Does he pause for long periods of time?

7. Punctuation errors--Does he ignore punctuation?

By observing the types of errors a student makes in oral reading, reading teachers will be able to set up a program for the correction of these errors.

Tests such as the "Gray Oral Reading Test" (1963) and the "Gilmore Oral Reading Test" (1952) are designed to provide a useful supplement to information gathered by silent reading tests. With these tests the teacher notes the child's ability to read orally paragraphs of increasing difficulty and answer questions concerning the content of what is read. The number of selections that can be read by a child during an administration of these tests limits the amount of reading behavior that can be sampled. Since oral reading tests must be administered individually, they are also rather demanding on teacher time. Additionally, oral reading requires several skills not necessary in silent reading, thereby increasing the difficulty of assessing only silent reading ability. It is noted that modifications of oral reading tests can be made. Such tests can also be used to assess silent reading comprehension and listening ability. For silent reading, the child is simply asked to read the paragraphs silently and answer the questions. Listening ability can be measured if the teacher reads the paragraph to the child and then asks him to answer comprehension questions.

Individual diagnostic tests can be used to assess the status and needs of those youngsters who require particularly detailed study. Individual diagnostic tests focus intensively on specific reading skills such as knowledge of initial consonants and synthesizing word parts. The disadvantage of the individual diagnostic test is that very few classroom teachers are trained to administer them. The "Durrell Analysis of Reading Difficulty" (1955) or the "Spache Diagnostic Reading Scale" (1963) are examples of individual diagnostic tests that can be used to assess the specific reading abilities and disabilities of chronically disruptive youth. The time required to administer a complete individual diagnostic test makes them somewhat impractical for the classroom teacher to use.

Informal Reading Inventories

The Informal Reading Inventory (IRI) has become increasingly important in the evaluation of students' reading achievement. The individual reading inventory evolved from the lack of trust and faith in the available standardized reading achievement tests. The informal reading inventory has been used as a means of gathering information for grouping and also individual diagnostic remedial work. Essentially, the IRI is a series of paragraphs rated in terms of reading difficulty. The selections to be read are often taken from a basal reader series. The IRI is administered by the classroom teacher to individual children. As the child reads a selection, allowed errors are recorded and word

attack skills are noted by the teacher. Comprehension is usually checked immediately by several questions on the content of the selections. Frustration reading levels are easily detected as well as the recreational reading level. The instructional level may be somewhat more difficult to determine. Specific criteria have been associated with the informal reading inventory.

1. The independent level is a level of supplementary dependent reading. The student should be able to read the book at home or at school without aid. The material should cause no difficulty. This is a level where oral reading and word calling is at 99% accuracy. The child will also comprehend 90% of the material.

2. The instructional level is the actual teaching level. The reading material must be challenging and not too difficult. There is 95% accuracy in oral reading and word calling ability. Comprehension of content is 75% or higher.

3. The frustration level is the level to be avoided. It is the lowest level of readability at which a child is able to understand. The material is too difficult and frustrates the pupil. There is less than 90% accuracy in oral reading and word calling. Comprehension is less than 50% and there are obvious distracting signs of tension and nervousness.

It must be cited that increasing numbers of authorities in the field are challenging the percentages associated with required degree of accuracy in oral reading and comprehension that has been previously

associated with informal reading inventories. This is especially true in the evaluation of reading performance of chronically disruptive youth.

Farr (1969) has been a proponent of the teacher construction of informal reading inventories. He supports the notion that when IRI's are used to plan an instruction, informal measurement procedures have more validity than do standardized tests. One of the major characteristics of the IRI which is attractive to most teachers is that the evaluation can be conducted with the same material as the student is using for instructional purposes. Teachers of chronically disruptive youth, as counselors and psychologists, must be aware of the IRI as a valuable evaluation technique.

The Cloze Method of Diagnosing Comprehension

The Cloze technique has been used to evaluate the student's ability to comprehend certain materials. Bormuth (1962) suggests the deletion of every fifth word from a reading selection and asking students to fill in the blanks.

For middle grade level students, the selection should be at least 500 words long if it is to provide a good notion of how well students are "tuned in" to the story line. Although certain purists will disagree, it is our belief that teachers who score Cloze exercises should accept reasonable replacements for the actual words that were

deleted. Since Cloze procedure is only one kind of measure, it is actually only a rough estimation of comprehension ability.

In a 250-word passage, there would be 50 closures (every fifth word deleted). Each correct response counts for two percentage points. To be correct the student must supply the author's exact word, though it might be misspelled. That is the way that the procedure has been standardized and that is the way the passage must be scored. Credit is not given for synonyms--what one person may consider a synonym another may not. The percentage score a student receives is used to determine his reading level for the passage.

58% - 100% correct - independent level
44% - 57% correct - instructional level
0% - 43% correct - frustration level

The Bormuth-Cloze procedure is becoming increasingly popular with reading experts. Within the students' responses are evaluations of the author's style and technique as well as a revelation of the background of information and syntax of the students being tested. Workers with chronically disruptive youth are encouraged to utilize Cloze techniques in their diagnostic reading programs.

Measuring Attitudes

The attitudinal measurement of chronically disruptive youth towards reading materials is of utmost importance. Like comprehension, attitudes are difficult to measure. It is axiomatic that a student's

affective response to reading selections is critical to his becoming a reader. With this in mind, it is felt that some kind of test measuring the chronically disruptive youth's attitudes to his reading experiences is an important aspect of the total evaluation process. If in the process of learning to read students learn to be bored with or even hate reading, the educational process is harmful rather than helpful to their growth in reading. Some individuals may actually feel that the chronically disruptive behavior is based on these early negative experiences with reading.

Consistent measuring of attitudes towards "reading" is difficult if not impossible since the reading takes so many forms and means so many things to different students. For example, a student may enjoy reading the sports page, the comics of the local newspaper, but may be completely turned off by reading a library book to complete an English assignment. Whether or not the individual likes "reading," it depends on what he is reading and for what purpose.

The most valid measures of a student's attitude toward reading would seem to be his response to individual selections. Since people tend to repeat pleasurable experiences and avoid unpleasant ones, we can assume that students who have more pleasurable than unpleasant reading experiences are probably learning to regard reading as the life-enrichment experiences of one kind or another. The following scale has been useful in measuring students' attitudes toward reading selections. With possible modification, there is utility in its use for the chronically

disruptive youth. One of the modifications might be to design rubber stamps with smiling faces equaling "strongly agree," neutral faces equaling "uncertain," and frowning faces equaling "strongly disagree." A more descriptive scale for measuring attitudes is as follows:

1. I enjoyed reading this selection.
   ____ Strongly Agree
   ____ Agree
   ____ Uncertain
   ____ Disagree
   ____ Strongly Disagree

2. This selection was boring.
   ____ Strongly Agree
   ____ Agree
   ____ Uncertain
   ____ Disagree
   ____ Strongly Disagree

3. This selection held my attention.
   ____ Strongly Agree
   ____ Agree
   ____ Uncertain
   ____ Disagree
   ____ Strongly Disagree

4. I disliked reading this selection.
   ____ Strongly Agree
   ____ Agree
   ____ Uncertain
   ____ Disagree
   ____ Strongly Disagree

In scoring the response choices, you would use this procedure. If the response choices are scored 5, 4, 3, 2, 1 for the positively stated items (numbers 1 and 3) and 1, 2, 3, 4, 5 for the negatively stated items (numbers 2 and 4), then a score of 20 would indicate the highest possible attitude; a score of four, the lowest possible attitude. Numbers one and three can be checked against numbers two and four to determine the degree of consistency in the student's responses. The chronically disruptive youth should not be expected to respond positively to all their reading experiences; but if the majority of their responses indicate negative attitudes against reading selections, something is wrong. One hopes that students would respond positively to most of the selections they read. If they are not in the reading program, it needs review and restructuring.

Criterion Referenced Testing for Functional Literacy

Criterion referenced testing is one of the most recent and fastest growing techniques for evaluating school achievement. Millman (1972) states that criterion referenced tests are used to measure performance against a specified criterion score without reference to the distribution of scores of others. This is in contrast to norm referenced tests which compare a student's score with others taking the test. The Individual Reading Inventory (IRI) was previously discussed when used with the child's existing reading materials as an example and modification of criterion referenced testing.

McDonald and Moorman (1974) described what may prove to have great promise for many chronically disruptive youth and their attempts to read. Although we take a most optimistic attitude towards the development of reading skills in chronically disruptive youth, it is only reasonable that we assume that some of these individuals will have extreme difficulty and possibly not reach a functional literacy, according to present-day standards. Standards of functional literacy are continuing to rise. Years ago literacy was regarded to fall at the fourth-grade level of ability. Many communities are beginning to designate that the ninth grade level of proficiency shall be regarded as the minimal level for functional literacy. McDonald and Moorman (1974) described twelve basic reading skills which an adult in higher society needs in order to function without handicaps.

The twelve objectives comprise the basis of the Minimal Reading Proficiency Assessment (MRPA):

1. A functional reader will correctly identify stated main ideas.
2. A functional reader will correctly identify inferred main ideas.
3. A functional reader will correctly identify conclusions drawn from a stated and/or inferred main idea.
4. A functional reader will correctly identify stated supportive details.
5. A functional reader will correctly identify conclusions drawn from stated or inferred supportive details.

6. A functional reader will correctly identify stated and/or inferred sequences within selected contents.

7. A functional reader will correctly answer relationship questions such as cause and effect, fact and opinion, and/or time and space.

8. Given written directions, a functional reader will demonstrate the ability to follow those directions.

9. Given tasks using an index and/or table of contents, a functional reader will demonstrate the ability to complete the given task.

10. Given tasks using a dictionary, a functional reader will demonstrate the ability to complete the given task.

11. Given tasks for extracting information from graphs, tables, maps, charts, diagrams, pictures, and/or cartoons, a functional reader will demonstrate the ability to complete the given tasks.

12. Given tasks for using context clues, a functional reader will select an appropriate meaning for a given unfamiliar word.

To measure student performance in the twelve skill areas, test items were developed. Derived from such sources as the daily newspaper, application blanks, contracts, drivers' manual, city maps, and tax forms, over 150 test items were developed. Three criteria were established in selecting test items: (1) an item must relate to the student's interest, (2) an item must be answered correctly by approximately 75% of the students in the sample, and (3) an item should

effectively discriminate between an adequate and an inadequate reader. The preliminary research indicated that this test is highly reliable and is capable of isolating individual student reading deficiencies.

The chronically disruptive youth, when entering into or departing from, an educational program in reading, may then be evaluated in terms of similar criterion-based functional literacy standards. Kelly (1974), in discussing "survival literacy" as it relates to understanding traffic signals, road maps, driver test manuals, lavatory signs, job want ads, and drug prescriptions, suggests the use of game types of devices to detect basic weaknesses and develop understanding of those concepts and basic areas necessary for present-day survival. His suggestions have much applicability and utility for the chronically disruptive youth with a severe reading disability.

Individualizing Reading and Learning Environments for Chronically Disruptive Youth

Placement decisions for chronically disruptive youth are based on a variety of factors. It is assumed that after thorough diagnosis and evaluation of the chronically disruptive youth's strengths and weaknesses, immediate action will take place to insure that the specific recommendations related to his reading program will be fulfilled. As there will undoubtedly be a variety of patterns of reading behaviors, there must

also be a variety of placement options that will include appropriate educational materials. Although much has been written about individual differences in children, we are still faced with a great amount of lip service and low levels of quality control related to educational placement of chronically disruptive youth. The ancient axiom that success breeds success and failure breeds failure is still as true today as it was years ago. The environmental setting that one chooses to serve chronically disruptive youth should be regarded as temporary in all cases. As chronically disruptive youth change, other options must be available to them. Whatever environment is decided upon, it must guarantee that the unique individual needs of chronically disruptive youth will be met in a more humanistic way than our more conventional approaches which in most cases have been related to failure and boredom. Following is a listing of descriptive terms often used in the field of reading that may additionally describe reading behavior of chronically disruptive youth.

Retarded reader.

Any student whose reading achievement is significantly below his grade placement may be called a retarded reader. This term indicates defective reading but does not limit the consequences that can develop from the use of it. Use of the term retardation has led to an erroneous

connotation that implies that the child has mental retardation. The two concepts should not be confused.

Disabled reader.

This term can be best applied to a student who is performing below his ability as measured by some test of general intelligence. Many educators stress the point that a certain arbitrary discrepancy must exist between achievement and potential. At one time, a two-year discrepancy was suggested as a lag sufficient to be considered a disability. Today, however, in dealing with young children we recognize that a child in first grade with a lag of even six months may experience enough difficulty to affect his personal/academic development.

Reluctant reader.

A student who has the ability and can perform up to grade level but often does not is called a reluctant reader. This student is usually erratic and inconsistent in his performance and does well in those subject areas he enjoys. When motivated, he achieves; when he is not motivated, he is usually called "lazy" by his teacher because of his erratic performance.

These terms are the most significant of all the labels given to students with problems in reading. As indicated, a name alone does not amount to a means for approaching the problem. Instructionally,

the labels used by the medical and educational professions are ambiguous, and they often add to the problem of dealing with children who are experiencing difficulty.

Reading is a most important means for gaining skills, knowledge, attitudes, and values. Since chronically disruptive youth will differ greatly in their ability to deal with reading tasks, we will make short mention of some basic kinds of individual differences that will affect reading and contribute to the labeling process which may determine the possible educational environment for chronically disruptive youth.

Experiences - Past and Present

Recognizing the fact that chronically disruptive youth are different in many ways will additionally lead us to regard that these differences are not discreet and isolated factors that can be studied under microscope. Rather, the individual differences of chronically disruptive youth are enmeshed and interwoven into the life pattern of each of them. Each year of the chronically disruptive youth's life adds to his uniqueness as a learner. This accumulation of life experiences which are oftentimes negative makes the teacher's job of identifying the child's special instructional needs more difficult.

Out-of-school experiences both past and present are of extreme significance for chronically disruptive youth in their relationship to the reading process. The uniqueness of these students is largely due to the

type and richness of the everyday experiences they encounter. The experiences form the basis for all of our concepts. Research has indicated that home environments that provide books, magazines, trips, excursions, good language patterns, parents who read, and other activities that require learning involvement tend to produce better readers. Chronically disruptive youth in most cases have been void of these past positive types of experiences. Negative experiences received from his home and community interactions can be related to self-concept deficiencies. Those experiences that build healthy egos and self-respect tend to make the complicated learning-reading progress for chronically disruptive youth a little easier.

Past and present school experiences of the chronically disruptive youth will have wide educational implications related to his success or failure. Varied and wide educational experiences conducted in the appropriate educational setting will have positive effects on the adjustment of chronically disruptive youth. The more restricted and rigid the reading program or learning program for chronically disruptive youth, the more difficulty that he will have in handling the total learning process. Placement decisions and teacher-ratio decisions, then, will definitely be affected by the experiential background of chronically disruptive youth who will bring to the educational setting a set of behaviors fostered from and within this experiential background.

Differences Within the Student Influencing Placement

Although it is difficult or impossible to separate environmental or experiential factors from biological factors, it is fact that many of the things that chronically disruptive youth and other children do relate back in some degree to biological heritage. Factors that may play a role in assignment to or formulation of a particular environment setting for chronically disruptive youth and their reading problems will be discussed under the topics of (1) ability factors, (2) learning rates, and (3) fluctuation factors.

Educators and psychologists have many definitions for ability but all recognize ability as an important factor in reading learning. Inherited ability is important because it helps us to (1) organize internally the incoming experiences we face daily, (2) adapt to our surroundings or external circumstances, and (3) assimilate and use our experiences to meet and cope with new situations and circumstances.

It is this author's opinion that much of the chronically disruptive youth's individual ability is determined by his biological endowments and his experiences within his environment. If inherent in the task of reading there is a concern with bringing our knowledge and abilities to printed symbols, then our ability to both cope with and use symbols and to profit from experiences are necessary. The chronically disruptive youth cannot take meaning from the symbols if he does not first have some understanding of the content he is to read.

In the selection and design of an educational environment for chronically disruptive youth, the individual abilities of the student will not cause problems in reading unless the specific abilities are ignored or taken for granted.

As ability factors are important, we must also acknowledge that each chronically disruptive youth has his own learning rate. The learning rate of chronically disruptive youth in many cases will influence the time spent and duration factors associated with his educational placement. A learning rate of chronically disruptive youth varies in accordance with many factors. His health, interest, ability, prior knowledge of prerequisite skills, and the meaningfulness of the material he is expected to learn all will affect the chronically disruptive youth's rate of learning. Chronically disruptive youth cannot be typified as either slow, average, or rapid learners. Within a group of chronically disruptive youth we will find individuals who exhibit learning rates associated with each of those categories. Certain chronically disruptive youth regardless of the educational environment will need more concrete and varied experiences than others. Many chronically disruptive youth possess superior reading skill and will need very little direct instruction or guidance on the part of the teacher. A caution is that although there might be minimal direction on the part of the teacher in terms of instruction, the teacher must make frequent assessments in order to keep apprised of the pupil's present pace and level. Chronically disruptive youth who possess significant emotional

overlays will in many cases exhibit increased learning rates as these emotional contributors to learning failure are relieved. Many chronically disruptive youth, like other students, may suffer from developmental lags and oftentimes show rapid progression in reading or other areas that these students have been regarded as "late bloomers." Most often these late bloomers are boys who appear to be slow learners in the first few grades. Oftentimes difficulties tend to dissipate before the end of the fourth grade. One significant problem with the late bloomer concept is that too often parents of handicapped children, and in our particular case chronically disruptive youth, develop false hopes for positive changes in behavior to happen. Probably the safest attitude to take is that we should make no wide generalizations about learning rate but accept the fact that differences in chronically disruptive youth do exist and must be considered when teaching reading in an appropriate personalized environment.

One of the most consistent descriptors of chronically disruptive youth is their behavioral fluctuation. Inconsistencies in interest, readiness and motivation, learning, drive, attention, and many other individual traits are qualities within the chronically disruptive youth that will affect reading progress and possibly influence the individual's placement in a particular setting. Chronically disruptive youth are not always ready for new learning tasks. From time to time their behavioral characteristics work in direct opposition to any new learning activity. Chronically disruptive behavior from a cause-effect dilemma

will contribute to peer relationship problems, home problems, personal problems, etc. Erratic and inconsistent behavior will influence placement decisions in terms of degree and kind of behavior.

The following section will describe the specific educational settings and personnel utilized in teaching reading to chronically disruptive youth.

The Regular Classroom and Mainstreaming

The ability of the regular classroom to adequately meet chronically disruptive youths' needs in reading will depend on the severity of the child's behavior. By the nature of the "label" that we have coined for this population, we have implied that these children do exhibit behavioral characteristics that are repetitive and disruptive to regular classroom environments. We do realize that both the terms chronic and disruptive are relative and possibly value judgments. What might be chronic behavior in terms of one observer or disruptive behavior in the eyes of another may be not really the case. The typical regular classroom today does not have personnel that is trained or equipped to handle chronically disruptive youth. The regular classroom is by far the desirable setting for children to receive assistance, but in most cases the chronically disruptive youth will not, at least at the onset, have self-control to withstand a whole day in the regular classroom. The goals of special education for chronically disruptive youth is to offer the option to have the child remain with his peers. The regular classroom should definitely be regarded as the optimal

focal point for the child's reading if at all possible. As many regular classrooms will be unable to serve the needs of chronically disruptive youth in reading because of factors such as severity of the child's problem, lack of experience in background of the teacher, or an administrative dilemma such as an unduly high pupil-teacher ratio, then other alternatives must be investigated.

The Special Class

Historically, the most popular alternative for dealing with children having severe behavioral problems has been the self-contained special class. Special classes have been under scrutiny because of the amount of research reported that indicates that children placed in special classes achieve in school work no better than and often not as well as similar children who remain in the regular grades. Non-academic variables such as social adjustment and self-concept levels have also been questioned in terms of the contribution special classes can make towards these variables. Dunn (1968) was one of the first special educators to question the degree of utilization of the special class to handle handicapped children. Alternatives were suggested which have been a significant factor in the designing of less isolating and more prescriptive types of educational recommendation. We must caution that many of the criticism and ultimate recommendations related to the special class as a delivery service model were made with the "mildly handicapped" in mind. It is our contention that chronically disruptive youth by their nature are not necessarily considered as

individuals possessing mild handicaps in terms of behavioral control. It is wise, then, that those individuals responsible for placement establish criteria that must be met for placement into a school system's available educational options. It is hoped that when a chronically disruptive youth is assigned to a special class, that the special class provides in terms of his reading and other academic needs: (1) specially trained teachers, (2) special materials, and (3) methods emphasizing individualized instruction with a workable teacher-pupil ratio.

The Special School - Public and Private

Placement of chronically disruptive youth in either private or public special schools generally follows the attempts to adjust to either the regular classroom or special class within a regular elementary or secondary school. In the special school, the chronically disruptive youth is not only segregated from norm-respective peers but is also brought into direct contact with other antisocial role models. Special schools of the private variety may be of either the residential or day-school variety where the child will return home after classes. Private residential schools of either the residential or day-school variety have increased in quality over the past decade. Although private facilities serving chronically disruptive youth are quite expensive, the payoff in change of behavior may be quite high because of the great amount of control and milieu immersion into a total remedial program. Mandatory education of handicapped children has contributed to the

success of the local districts who recommend the child to the particular private facility. The special school, because of the segregation and stigma, oftentimes to both child and family, should be considered and examined. But it should be regarded as an alternative placement after attempts to integrate the youth into the regular classroom or self-contained classes within a regular elementary or secondary school.

Diagnostic Curriculum Development Centers

Larger and more affluent school districts have organized centers within their school districts where chronically disruptive youth and children having other types of problems are given temporary assignment. These children are generally assigned to the facility on an out-client basis such as one or two hours a day for possibly their total program with a placement duration of up to six months. The chronically disruptive youth who is placed in this setting receives a detailed diagnostic workup. An individual curriculum design and appropriate materials are developed by specialists for this youth and upon termination of their experience, the teacher receives a complete curriculum and program to work with the individual. Available at the center would be vast amounts of materials and expert consultation to assist in the development of teaching strategies based on the chronically disruptive youth's learning and behavioral patterns.

The Resource Room and Variations

The resource room model is a delivery of services system that fits well into the educational needs of chronically disruptive youth who are mildly handicapped and can withstand longer periods of time in a regular class or special class. The resource room is an alternative to both self-contained classes and regular classes. Chronically disruptive youth placed in a resource room setting would be able to receive their instruction individually or in small groups. The resource room will generally include a collection of necessary materials to work with the child on a specific academic deficiency. The resource room option could also be utilized for any other academic or "therapeutic" strategies that the chronically disruptive youth might require. The resource room approach is scheduled on a regular basis but the child will have as his home base the regular class or a special class. Reger (1973) discusses the philosophy, administrative structure, including advantages and disadvantages of the resource room concept. Wiederholt (1974) offers additional information for the educator of mildly handicapped children who is interested in establishing resource rooms for his students. Hammill and Bartel (1975) have also cited some of the basic resource room types including categorical and noncategorical models.

Categorical resource room models are reserved for those children who fall within a community's particular disability labeling system. Separate resource rooms may be established for each of the

various types of handicapping conditions. In the case of chronically disruptive youth, if this were the case, these students would spend the majority of their school time in the regular classroom but would also receive additional work in the designated resource room for children with behavioral disorders. Glavin, Quay, Annesley, and Werry (1971) have described resource room programs for the emotionally disturbed which may have implications for the programming of chronically disruptive youth. Sabatino (1971) gives similar comment as the categorical resource room approach may apply to learning disabled children.

Non-Categorical Resource Room

The non-categorical resource room approach has received much support and acceptance. This type of delivery of service model is designed to meet the educational needs of all peoples in a given school not just those who have been or are in the special education program. Non-categorical resource rooms have similarities in that specific areas of deficit in reading, spelling, behavior are identified and consequently remedial programs are planned and implemented. The stigmatization associated with categorical resource rooms is removed in the non-categorical resource room approach as long as the scheduling of children includes a wide variety of students. Gifted and talented youngsters may also receive instruction in the

non-categorical resource room. This maneuver alone does much in counteracting any stigma associated with special help given pupils in a resource room concept.

In some situations, the resource room teacher may, instead of having the specific child come to the resource room, actually go to the home classroom of the individual for certain periods of the day. This approach eliminates the "withdrawal from the classroom" technique which may attribute to stigmatization. By allowing the teacher to work with other children besides those identified as needing special help will also reduce stigmatization of such children.

Other Techniques

Many other modifications of standard procedures, standard delivery of service procedures, can be introduced to programs serving chronically disruptive youth. Paraprofessionals, according to Mauser (1970) can be a most valuable in-class or out-of-class support measure in working with handicapped children, especially in the area of reading. Ellson, Harris, and Barber (1968) have noted the effectiveness of trained paraprofessionals utilizing materials that are programmed not for the child but for the tutor administering the materials. Peer tutoring has also been receiving a great amount of attention recently and shows great promise as an alternative strategy in dealing with chronically disruptive youth with reading problems. Regardless of the delivery of service models initiated in your

particular program for chronically disruptive youth, great attention must be given to flexibility in the grouping and scheduling of such students.

Concluding Statement

The previous pages should have given the teacher of chronic-disruptive youth basic background information related to the reading characteristics and reading processes of chronic-disruptive youth. Procedures for assessing and evaluating the student's reading performance have also been discussed. Finally, placement options for chronic-disruptive youth were described. With this information, the reader should have the necessary background and requisites to plan actual strategies for teaching reading to chronic-disruptive youth. The following chapter is designed to offer the practitioner suggestions on "what to do" after we have identified, evaluated, and placed the chronic-disruptive youth in an appropriate educational environment.

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TABLE OF CONTENTS

		Page
CHAPTER I	NEGLECTED AND DELINQUENT YOUTH: DEMOGRAPHIC FINDINGS	1
	Introduction	1
	Who Are Neglected and Delinquent Youth?	2
	Social Maladjustment	6
	Social-Emotional Maladjustment	8
	Types of Social Maladjustment	12
	The Withdrawal-Aggression Continuum	15
	Juvenile Delinquency	17
	Important Considerations in Delinquency	27
	Sex	27
	Age	28
	Social Class	28
	The Family as the Primary Social "Subculture"	29
	Incidence of Social Maladjustment	31
	Social Maladjustment and Other Handicaps	53
	Recidivism	65
	Treatment Relevance	67
	Individual Counseling	70
	Group Counseling	72
	Milieu Therapy	73
	Pre-Release Programs	74
	References	77
CHAPTER II	PSYCHOSOCIAL/EDUCATIONAL ASSESSMENT OF JUVENILE DELINQUENTS	85
	Introduction	85
	Problems in the Prediction of Delinquency	90
	Assessment Instrumentation for Predicting Delinquency	97
	Gluecks' Social Prediction Scale	97
	Validation of Prediction Efforts	100
	The Kvaraceus Delinquency Proneness Checklist and Rating Scale	103
	Minnesota Multiphasic Personality Inventory	106

TABLE OF CONTENTS

(continued)

Page

CHAPTER II (continued)

Variables in Psychosocial/Educational Assessment 109
Intellectual Capacity 109
Medical and Neurological Evaluation 112
Language Development 114
Diagnosis of Reading Skills 116
Diagnosis of Mathematical Computation 118
Diagnosis of Spelling Ability 120
Academic Achievement Levels 121
Study and Organizational Skills Evaluation 124
Personality Assessment 126
California Psychological Inventory 127
The California Life Goals Evaluation Schedules 131
The California Test of Personality: A Profile of Personal and Social Adjustment 132
A Two-Step Process for Identifying Emotionally Handicapped Pupils 133
The Ego Ideal and Conscience Development Test (EICDT) 135
Behavior Cards: A Test Interview for Delinquent Children 136
The Hostility and Direction of Hostility Questionnaire (HDHQ) 137
The Hand Test 138
Self-Concept 140
Vocational Interest Pattern Assessment 142
Summary 146
References 147

CHAPTER III READING THEORY AND RESEARCH AND CHRONICALLY DISRUPTIVE YOUTH . . . 155

Introduction 155
Theories and Models of Reading 158
Taxonomic Models 161
Psychometric Models 161
Psychological Models 162
Linguistic Models 171
Transactional Models 176

TABLE OF CONTENTS

(continued)

Page

CHAPTER III (continued)

Correlates of Success and Failure in Reading 178
Intelligence Quotient and Mental Age. 179
Socioeconomic Factors. 184
Background Experience. 185
Level of Motivation 186
Language 187
Reading as a Sensory Process 188
Reading and Vision 189
Reading and Hearing. 193
Assessing and Evaluating Reading Growth of Chronically Disruptive Youth. 195
Standardized Reading Achievement Tests 197
Individual Reading Tests--Oral and Silent. 201
Informal Reading Inventories 203
The Cloze Method of Diagnosing Comprehension 205
Measuring Attitudes 206
Criterion Referenced Testing for Functional Literacy . . . 209
Individualizing Reading and Learning Environments for Chronically Disruptive Youth 212
Retarded Reader 213
Disabled Reader 214
Reluctant Reader 214
Experiences - Past and Present 215
Differences Within the Student Influencing Placement . . . 217
The Regular Classroom and Mainstreaming 220
The Special Class. 221
The Special School - Public and Private 222
Diagnostic Curriculum Development Centers 223
The Resource Room and Variations 224
Non-Categorical Resource Room 225
Other Techniques 226
Concluding Statement. 227
References 228

TABLE OF CONTENTS

(continued)

	Page
CHAPTER IV MATHEMATICAL PROGRAMMING FOR DELINQUENT YOUTH	237
Overview of Academic Characteristics	237
Programming Models for Delinquent Youth	241
Dimensions of an Academic Program	244
Flexibility	244
Relevancy	245
Diagnostic/Prescriptive Format	245
Concept and Skill Emphasis	246
Enhancement of Social Skills	246
Independent of Management Procedure	246
Content Components of a Mathematics Program for Delinquent Youth	247
Interfacing Content with Dimensions	247
Diagnosis	250
Fountain Valley Teacher Support System in Mathematics	253
Prescriptive Materials Retrieval System	256
Key Math	258
Evaluation	259
Validity	260
Pattern Recognition Skills Inventory (PRSI)	260
Verbal Problem Solving	262
Math Labs	267
Essential Components of Math Laboratories	268
References	275
CHAPTER V VOCATIONAL PROGRAMMING FOR CHRONICALLY DISRUPTIVE YOUTH	277
Introduction	277
Curriculum Evaluation	280
Program Studies	284
Training and Instructional Preparation	285
Learning Characteristics	287
Management Procedures	288
Behavioral Approach	289
Program Development	294

TABLE OF CONTENTS

(continued)

Page

CHAPTER V (continued)

Prevocational and Vocational Preparation 296
Personalized Vocational Cluster Development 297
Programming Steps 299
Vocational Development Center 301
Diagnostic Procedures 302
Environmental Assessment 303
Ancillary Assessment 304
Curriculum 307
Management Tactics 307
Performance Contracting 310
Token Economy 311
Model Program 312
Conclusions 315

References 317

CHAPTER VI BEHAVIOR MODIFICATION WITH DISRUPTIVE, DELINQUENT, AND OTHERWISE DEVIANT ADOLESCENTS . . 326

Deviant Personality 327
Behavioral View of Deviance 329
Acquisition 329
Maintenance 331
Behavior Modification Assumptions 333
Observable Phenomena 334
Target Assessment 337
Effectiveness Verification 338
Multiple-Baseline Design 339
Reversal Design 346
Behavior Modification Procedures 351
Regulating Performance 352
Strengthening Behavior 352
Weakening Behavior 356
Promoting Acquisition 359

TABLE OF CONTENTS

(continued)

Page

CHAPTER VI (continued)

Composite Behavior Modification Techniques 362
Behavioral Contracting 362
Token Economies 370
Reinforced Modeling 379
Concluding Remarks 385
References 387

CHAPTER VII A REVIEW OF DRUG AND ALCOHOL ABUSE AMONG CHILDREN AND YOUTH. . 393

Introduction 393
Learning Theory Approach 396
Positive Reinforcement 397
Negative Reinforcement 399
The Way Drugs Are Used 400
Experimental User 400
Recreational User 401
Compulsive Abuser 402
Societal Conditions Which Encourage Drug Consumption . . . 402
Summary of Motivational Factors 404
Drug Addiction and Dependency 406
Classification of Drugs 409
Intensifiers 409
Desensitizers 411
LSD 413
Marijuana and Hashish 417
Amphetamines 423
Alcohol 426
Barbiturates 430
Heroin 433
Rehabilitation 436
Summary 438
References 439

TABLE OF CONTENTS

(continued)

	Page
CHAPTER VIII PSYCHOEDUCATIONAL MANAGEMENT OF DISRUPTIVE YOUTH	442
Introduction	442
Client-Centered Therapies	443
Reality Therapy	446
Comprehensive Vocationally Oriented Psychotherapy	447
Adlerian Approach	449
Milieu-Oriented Therapies	452
Community Adjustment	453
Educational Adjustment	459
The Psychoeducational Model	460
Catch-Up Program	463
The Social Competence Model	465
The Bryant Youth Educational Support Center (YES)	470
The DuPage Study	471
Off-Campus Learning Center	472
Generalized Student Profile	474
The Instructor's Role	476
Objectives	478
Evaluation	482
The General Studies Program (GSP)	483
Program Design	487
Summary	490
References	494
CHAPTER IX ADMINISTRATIVE MANAGEMENT OF INSTITUTIONS AND CENTERS FOR DELINQUENT YOUTH	497
Introduction	497
The Development of Institutions	500
Current State of the Art	512
Essential Aspects of Administration	523
Current Trends	523
Planned Change	526
Dynamics of Administration	529
Decision Making	536
The Process of Decision Making	537

TABLE OF CONTENTS

(continued)

	Page
CHAPTER IX (continued)	
Institutional Program Models	538
Formal Organization	539
Types of Formal Organization	540
Systems Analysis	546
Evaluation	555
Goals and Objectives	559
Program Evaluation	563
Evaluation Design	564
Performance Appraisal of Personnel	566
A Simplistic Program Evaluation Process	568
A Practical Evaluation Design	571
Pre-Situational Stage	571
Situational Stage	572
Post-Situational Stage	573
The Institutional Administrator	576
References	597
CHAPTER X PREVENTION, PUNISHMENT, AND REHABILITATION	608
Introduction	608
Differentiating Correctional Typologies	609
Punishment	614
Prevention	620
Primary Prevention: A Responsibility of the Schools	623
Early Identification and Early Prevention	625
An Instructional Approach	625
The Surface Versus the Causal Approach of the Teacher to Child Behavior	628
An Elementary School Preventative Effort	629
A Secondary-School Preventative Effort	632
Vocational Preparation as Prevention	635
Special Summer Programs	638
Community-Based Prevention	642
Other Preventative Efforts	645

TABLE OF CONTENTS

(continued)

	Page
CHAPTER X (continued)	
Assumptions	648
Guiding Principles	648
Participants	649
Organization and Program: Youth Council	650
Summary of Prevention Activities	655
The Cambridge-Somerville Project	656
New York City Youth Board	656
Maximum Benefits Project	657
Midcity Project	657
Youth Consultation Service	657
Rehabilitation	661
Institutionalization as a Treatment Measure	664
Vocationally Oriented Institutional Programs	671
Community Treatment: Alternative Plans to Institutionalization	675
State of the "Rehabilitation" Act in Correctional Education	681
Community Rehabilitation and the Schools	685
References	691

TABLE OF FIGURES

Page

CHAPTER I:

Figure 1 Psychosocial Adaptation 11

CHAPTER IV:

Figure 1 Interactive Unit Model. 249

Figure 2 Example of Criterion-Referencing 254

Figure 3 UPS Matrix for Indirect Verbal Problems . 266

CHAPTER V:

Figure 1 Integrated Vocational Program 305

Figure 2 Model Program 314

CHAPTER VI:

Figure 1 Graphic Chart - Six Days 341

Figure 2 Graphic Chart - Thirteen Days 343

Figure 3 Graphic Chart - Twenty-Two Days . . . 344

Figure 4 Graphic Chart - Thirty Days. 345

Figure 5 Graphic Chart - Tardies - Seven Days . 348

Figure 6 Graphic Chart - Tardies - Thirty-Five Days 350

Figure 7 Contracting - Daily Attendance Record Chart 368

Figure 8 Behavioral Contract Sample 369

TABLE OF FIGURES

(continued)

Page

CHAPTER VIII:

Figure 1 Ecological System of a Child 467

CHAPTER IX:

Figure 1 Special Education Programs 510

Figure 2 Getzels' and Guba's Description of Educational Administration as a Social Process. 522

Figure 3 Model of Adult Basic Education in Corrections 554

Figure 4 Evaluation Process 569

Figure 5 Evaluation Worksheet 575

TABLE OF TABLES

Page

CHAPTER I:

Table 1 — Behavior Problems Shown by One-Third or More of the Boys and Girls at Each Age Level 33

Table 2 — The Prevalence of Some Behavior Characteristics in a Weighted Representative Sample of 482 Children Aged 6 to 12 as Reported by Their Mothers 37

Table 3 — Delinquency Rates (1960) by Sex, Race, and Age 39

Table 4 — Juvenile Court Delinquency Rates (1960) by Sex, Race, and Income 41

Table 5 — Juvenile Court Delinquency Rates (1960) by Sex, Race, and Number of Parents in the Home 42

Table 6 — Breakdown, by Category, of Nonviolent Crimes Committed by Youth 48

Table 7 — Length of Recorded Criminal Activity in Relation to Offender's Age 49

Table 8 — Age of the Offenders on Sentence to Borstal Shown According to Age at First Conviction 50

Table 9 — Type of Current Offense Shown According to the Number of Criminal Associates . . 51

Table 10 — Distribution of Offenders According to Degree of Previous Recidivism and Type of Current Offense 52

Table 11 — Movements of Patients from Ward Before and After Inception of Program 64

TABLE OF TABLES

(continued)

		Page
CHAPTER V:		
Table 1	Curriculum Content Areas	308
CHAPTER VIII:		
Table 1	A Comparison Among the Proponents of the Major Therapeutic Approaches on Selected Dimensions	444
Table 2	How to Correct Childrens' Misbehaviour . .	451
Table 3	Schedule of Classes	458
Table 4	The Self-Control Curriculum: Overview of Curriculum Areas and Units	492
CHAPTER IX:		
Table 1	Planned Change Model	528
Table 2	Table of Organization - Type 1	541
Table 3	Table of Organization - Type 2	542
Table 4	Table of Organization - Type 3	545

TABLE OF TABLES

(continued)

Page

CHAPTER X:

Table 1 Completed Delinquency Prevention Experiments, 1937-1965 658

Table 2 Job History and Legal Status on Five-Year Followup (Experimental Group) 673

Table 3 Job History and Legal Status on Five-Year Followup (Control Group). 674